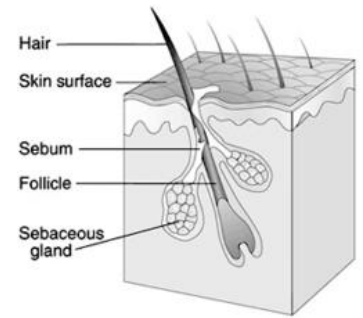


What is Acne?

Acne is a disease of the skin's sebaceous glands. Sebaceous glands produce oils that carry dead skin cells to the surface of the skin through follicles. When a follicle becomes clogged, the gland becomes inflamed and infected, producing a pimple.



Who Gets Acne?

Acne is the most common skin disease. It is most prevalent in teenagers and young adults. However, some people in their forties and fifties still get acne.

What Causes Acne?

There are many factors that play a role in the development of acne. Some of these include hormones, heredity, oil based cosmetics, topical steroids, and oral medications (corticosteroids, lithium, iodides, some antiepileptics). Some endocrine disorders may also predispose patients to developing acne.

Skin Care Tips:

- Clean skin gently using a mild cleanser at least twice a day and after exercising. Scrubbing the skin can aggravate acne, making it worse.
- Try not to touch your skin. Squeezing or picking pimples can cause scars.
- Males should shave gently and infrequently if possible. Soften your beard with soap and water before putting on shaving cream.
- Avoid the sun. Some acne treatments will cause skin to sunburn more easily.
- Choose oil free makeup that is “noncomedogenic” which means that it will not clog pores.
- Shampoo your hair daily especially if oily. Keep hair off your face.

What Makes Acne Worse?

- The hormone changes in females that occur 2 to 7 days prior to period starting each month.
- Bike helmets, backpacks, or tight collars putting pressure on acne prone skin
- Pollution and high humidity
- Squeezing or picking at pimples
- Scrubs containing apricot seeds. These can damage skin and allow bacteria into skin.

Common Acne Myths:

Stress, chocolate and greasy foods do not cause acne.

Treatment for Acne:

Grade I: Mild acne causes a few blemishes which can include whiteheads, blackheads, and a few pustules also known as pimples. They can be treated with a gentle cleanser and over the counter products such as those containing benzoyl peroxide and/or salicylic acid. These medications however do not work over night. They require 4-8 weeks of treatment to see an improvement. Once the skin is clear, you must continue to treat the skin to prevent breakouts.

Grade II: Moderate Acne causes more blemishes and may require prescription strength products such as:

- Retinoids – ie. tretinoin, adapalene or tazarotene (These products will often cause the skin to become red and even worsen the acne before it becomes better)
- Adapalene-benzoyl peroxide – an effective combination product of retinoid and benzoyl peroxide
- Prescription-strength benzoyl peroxide combined with an antibiotic such as erythromycin or clindamycin.
- Azelaic acid - An antimicrobial with mild comedolytic and anti-inflammatory properties. It can be helpful in reducing postinflammatory hyperpigmentation.

All of these drugs require 4-8 weeks of treatment before an improvement is noted. Once the skin is clear, you must continue to treat the skin to prevent breakouts. Acne flare ups are common.

Grade III: Moderate to severe acne involves more swelling and increased number of pustules. It often involves more body areas other than the face including neck, shoulders, chest and back. Treatment requires a combination of an oral antibiotic and adapalene-benzoyl peroxide. The combination is important in order to prevent the development of antibiotic resistance. Oral antibiotics are administered for at least 6 to 8 weeks and up to several months, although some patients require indefinite antibiotic therapy.

If repeat treatment of antibiotics is necessary, an antibiotic that was effective in the past is used again. If antibiotics have been unsuccessful and especially if 2 antibiotics from different classes have been ineffective, a culture can help guide antibiotic selection.

As with all acne treatments, it can take 1-2 months to see improvement. Patients often give up on a treatment just as it is starting to help.

Acne in females with hormonal involvement

Hormonal therapy may be used in women who experience acne flares associated with menstrual periods, ovarian or adrenal hyperandrogenism and in patients with polycystic ovary syndrome. Treatment options include combined oral contraceptives containing cyproterone plus ethinylestradiol, or anti-androgenic drugs including spironolactone. Treatment often requires a specialist in endocrinology.

Grade IV: Severe Acne causes red, swollen tissue, extreme amount of pustules along with cysts and nodules under the skin. This type of acne is most likely to cause permanent scarring. It is best treated by a dermatologist who will often prescribe isotretinoin for 5-6 months. Patients are closely monitored during treatment with this drug due to potential adverse side effects.

Resources:

http://www.niams.nih.gov/Health_Info/Acne/acne_ff.asp#c

<http://emedicine.medscape.com/article/1059368-overview>

<https://online.epocrates.com/noFrame/showPage?method=diseases&MonographId=101&ActiveSectionId=41>

<http://www.aad.org/dermatology-a-to-z/diseases-and-treatments/a---d/acne/diagnosis-treatment>

<http://www.theskinencyclopedia.com/grades-of-acne.html>